

NEONATAL RESPIRATORY COMPLICATIONS RELATED TO WEIGHT AND GESTATIONAL AGE IN A MATERNITY HOSPITAL

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Abstract: This study addresses the transformations that have occurred in obstetric and neonatal care due to scientific development, aiming to minimize mortality, especially in premature or low birth weight newborns. The objective is to understand the relationship between neonatal respiratory complications, weight and gestational age, identifying prevalence and main respiratory complications in a maternity hospital in southwest Goiás. Using a quantitative method and descriptive-analytical analysis, 1416 medical records from a maternity hospital were analyzed from January to December 2013. The majority of births occurred between the 38th and 40th week of pregnancy (83.5%). Of the newborns, 81.5% were appropriate for gestational age (AGA), 13.8% were small (SGA) and 3.7% were large (LGA). Respiratory complications occurred in 18.3% of cases, highlighting respiratory distress syndrome (11.80%), meconium aspiration syndrome (3.10%) and pneumonia (0.60%). The correlation between prenatal consultations and respiratory complications was significant ($p=0.025$), indicating a lower occurrence with more consultations. Correlations between respiratory complications, birth weight and gestational age were observed, indicating that lower weight and gestational age increase the likelihood of complications ($p=0.000$ and $p=0.004$, respectively). High rates of infant morbidity and mortality are linked to low birth weight newborns, representing a public health problem. Care practices to reduce births with GA and very low weight are essential, contributing to improving quality of life and reducing costs with specialized care. Promoting conditions conducive to the healthy development of newborns is crucial to improving neonatal health care.

Keywords: Neonatal respiratory complications; Birth weight; Gestational age; Child mortality; Prenatal.

INTRUCTION AND OBJECTIVES

There have been transformations in recent years due to the development and scientific advancement in obstetric and neonatal care. Increasingly, ICUs are equipped to minimize mortality. However, despite the undeniable progress, newborns (NB) who require greater assistance are considered at risk, especially when the birth is premature or there is low birth weight (SARMENTO, GJV, 2007). The literature shows that there are many factors that can compromise the survival and development of newborns and infants, among which we can divide them into biological and environmental factors. (ALVES, 2012). Therefore, this study aims to provide healthcare professionals with a greater understanding of the relationship between neonatal respiratory complications and weight and gestational age. In addition to identifying the prevalence and what are the main neonatal respiratory complications in a maternity hospital.

METHODOLOGY

This is an analytical descriptive study research, with a quantitative method, where data was collected from medical records of a maternity hospital in the southwest of Goiás, from January to December 2013. The sample consisted of 1416 medical records that were complete and clear. The entire set of data collected from the medical records was organized in an Excel® spreadsheet. After that, they were transferred to a SPSS spreadsheet – Statistical Package for Social Sciences (version 16.0) and the descriptive statistical analyzes were processed. Correlation tests between variables (birth weight, gestational age and respiratory complications) were performed using the median mean and the Pearson correlation coefficient with a 95% confidence interval.

RESULTS AND DISCUSSIONS

In a maternity hospital in the southwest of Goiás, in 2013, there were 1416 births, with the month of June having the highest peak of births. Among them, a large majority between the 38th and 40th week (83.5%). According to the distribution of GA x Weight, it was observed that 81.5% of newborns were born appropriate for gestational age (AGA), 13.8% small for gestational age (SGA) and 3.7% large for gestational age (GIG). Therefore, premature newborns are at risk of respiratory complications due to the lungs not being fully developed and the other extreme, post-term newborns may also be at risk due to suffering at the time of birth, due to asphyxia for example. Among all births in 2013, only 18.3% had any respiratory complication, the most common being respiratory distress syndrome (RDS) with 11.80%, then meconium aspiration syndrome (MAS) with 3.10% and lastly pneumonia, 0.60%. The correlations between the mother's age and the number of prenatal consultations showed that there is a correlation between the number of prenatal consultations and respiratory complications ($p=0.025$). In this sense, it was observed that the greater the number of prenatal consultations, the lower

the appearance of respiratory complications in newborns born. Regarding the correlations made between the existence of respiratory complications and birth weight, GA x Weight and GA, a correlation can be observed in all situations. This implies that for a given sample, the lower the birth weight and gestational age, the greater the possibility of developing respiratory complications ($p=0.000$ and $p=0.004$, respectively) and the higher the GA x Weight ratio, the greater the possibility of respiratory complications.

CONCLUSION

It is observed that high rates of infant morbidity and mortality in the country are related to the high number of low birth weight newborns, constituting a public health problem. Therefore, the development and implementation of care practices aimed at reducing births with GA and very low weight can contribute to improving the population's quality of life and reducing the costs of highly specialized care. Furthermore, it is extremely important that health services mobilize to promote adequate improvements in health care for newborns, in which they develop conditions conducive to their healthy development.

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